

**REMARKS****35 U.S.C. §103(a) Rejections****Sharp:**

Claims 33 - 35, and 39, are rejected under 35 U.S.C. §103(a) as obvious over U.S. 5,297,512 issued to Sharp (hereinafter "Sharp") for the reasons of record stated at pages 3 and 4 of the Office Action. Applicants respectfully traverse this rejection. Sharp purports to relate to an ultrasonic hairbrush for grooming an animal.

Page 3 of the Office Action asserts that *"a cleaning head (Figure 1) is adapted to be removably mounted to the housing wherein the head is capable of being interchangeable (as it is attached by a "friction fit")"*. Applicants disagree with this assertion. There is no suggestion in Sharp either express or implied that the cleaning head of Sharp is interchangeable. In fact, Column 2, lines 35 - 40, of Sharp provides only the following with regard to the friction fit *"The housing has been shown in position removed from the hairbrush portion and in use, the housing is secured by a friction fit directly to a first member to which the ultrasonic sound signal generating circuit and vibrating means are mounted and thereby covers these components accordingly."*

Just because the housing of Sharp is secured by a friction fit does not mean that the cleaning head is interchangeable. There is no suggestion in Sharp to link the friction fit disclosed in Sharp with the interchangeable cleaning head claimed by Applicants. It is impermissible to utilize Applicants' invention to reconstruct the prior art. "Obviousness may not be established using hindsight or in view of the teachings or suggestion of the inventor." Hence, Claims 33 - 35 and 39 of the instant application are unobvious over Sharp.

Furthermore, Page 3 of the Office Action provides that Sharp does not disclose utilizing a cleaning surface area greater than  $6.25 \text{ cm}^2$ . Applicants agree with this. However, the Office Action goes on to indicate that *"Figure 1 indicates a finger defining a scale for the size of the device indicating that the area is very likely greater than  $6.25 \text{ cm}^2$ "* assertion.

Applicants disagree with this assertion. To establish a prima facie case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference. Second, there must be a reasonable expectation of success. Third, the prior art reference must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. MPEP 2142 citing *In re Vaack*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Figure 1 of Sharp shows a finger touching the housing of the apparatus. However, there is nothing to suggest in Figure 1 Applicants' limitation of a minimum cleaning head surface area of greater than about  $6.25 \text{ cm}^2$ . Nor is it clear that the finger touching the housing of the apparatus equates to a cleaning head greater than about  $6.25 \text{ cm}^2$ . As provided above, it is impermissible to use hindsight to reconstruct the prior art from Applicants' invention.

On page 14 of the Office Action, the Examiner indicates that *"it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure".* As discussed above, Sharp does not teach or suggest *inter alia* a cleaning head that is interchangeable. Furthermore, Sharp does not teach or suggest a cleaning head greater than about 6.25cm<sup>2</sup>. This is knowledge which is gleaned only from Applicants' disclosure.

Hence, as a prima facie case of obviousness has not been met, Claims 33 - 35 and 39 of the instant application are unobvious over Sharp. Applicants respectfully request that this rejection be reconsidered and withdrawn.

**Bock (U.S. 5,369,831) in view of Dolinsky (U.S. 4,288,883):**

Claims 33 - 35, 39, and 42 - 45 are rejected under 35 U.S.C. §103(a) as obvious over U.S. 5,369,831 issued to Bock (hereinafter "Bock '831") in view of U.S. 4,288,883 issued to Dolinsky (hereinafter Dolinsky) for the reasons of record stated at pages 4 - 5 of the Office Action. Applicants respectfully traverse this rejection. Bock '831 teaches an ultrasonic toothbrush for removing plaque and tartar from teeth. Dolinsky teaches a combined tooth brush and gum massaging device. On page 4 of the Office Action, the Examiner indicates that:

*"the transducer means has an average oscillating frequency of from about 1000 Hz to about 100 kHz (Column 2 lines 66 - 68, wherein "ultrasonic" is defined as designating or a frequency of mechanical vibrations above the range audible to the human ear, i.e.; above 20,000 vibrations per second" according to The Webster's New World Dictionary of American English, Third College Edition Copyright ©1988 by Simon & Schuster, Inc. wherein 20,000 vibrations per second converted into Hertz, is 20,000 Hz or 20 kHz)."*

With regard to the Examiner's assertion that column 2, lines 66 - 68 of Bock '831 teaches a *"transducer means having an average oscillating frequency of from about 1000 Hz to about 100 kHz"*, there is no such teaching or statement at column 2, lines 66 - 68 of Bock '831<sup>1</sup>. Furthermore, there is no such teaching or statement anywhere else in Bock '831 or anywhere in Dolinsky. In fact, this specific frequency range is knowledge which has come directly from Applicants' instant disclosure. Hence, the Examiner is impermissibly reading Applicants' claim limitation into Bock '831. Thus, as Claims 33 - 35, 39, and 42 - 45 are unobvious over Bock '831 in view of Dolinsky. Applicants respectfully request that the Examiner reconsider and withdraw this rejection.

**Bock (U.S. 5,546,624) in view of Dolinsky (U.S. 4,288,883):**

Claims 33 - 35, 39, and 42 - 45 are rejected under 35 U.S.C. §103(a) as obvious over U.S. 5,546,624 issued to Bock (hereinafter "Bock '624") in view of U.S. 4,288,883 issued to Dolinsky

<sup>1</sup> Column 2, lines 66 - 68 of Bock '831 indicates the following: *"In the following discussion, unless otherwise qualified, the term "ultrasonic" refers to either subsonic, sonic, or ultrasonic frequencies"*.

for the reasons of record stated at pages 6 - 7 of the Office Action. Applicants respectfully traverse this rejection. Bock '624 teaches an ultrasonic toothbrush for removing plaque and tartar from teeth. Dolinsky teaches a combined tooth brush and gum massaging device.

Bock '624 does not teach or suggest a transducer means having an average oscillating frequency of from about 1000 Hz to about 100 KHz. With regard to the oscillation frequency of the Bock '624 toothbrush, page 6 of the Office Action indicates that "*the frequency is 1.6 MHz.*" The Office Action then goes on to assert that the 1.6 MHz is about 100 KHz. Applicants disagree with this assertion. Referring to column 8, line 43 of Bock '624, it is disclosed that a "*useful frequency is 1.6 MHz*". The frequency range claimed by Applicants is substantially lower than the 1.6 MHz (i.e.; 1.6 MHz is equivalent to 1,600 KHz) disclosed by Bock '624. It is impermissible to reconstruct the prior art in hindsight utilizing Applicants' claimed invention as the template. [See MPEP §2142].

Yet further, page 6 of the Office Action indicates that:

*"the transducer means has an average oscillating frequency of from about 1000 Hz to about 100 kHz, since ultrasonic refers to subsonic, sonic, or ultrasonic (Column 3 Lines 51 - 55;...)."*

With regard to the Examiner's assertion that column 8, line 43 of Bock '624 teaches "*the transducer means has an average oscillating frequency of from about 1000 Hz to about 100 kHz*", there is no such teaching or statement at column 8, line 43 of Bock '624<sup>2</sup>. Furthermore, there is no such teaching or statement anywhere else in Bock '624 or anywhere in Dolinsky. In fact, this specific frequency range is knowledge which has come directly from Applicants' instant disclosure and not from Bock '624 or Dolinsky. The Examiner is impermissibly reading Applicants' claim limitation into Bock '624. This is impermissible as hindsight reconstruction of the prior art. [See MPEP §2142]. Hence, as Claims 33 - 35, 39, and 42 - 45 are unobvious over Bock '624 in view of Dolinsky, Applicants respectfully request that the Examiner reconsider and withdraw this rejection.

**Hoffman in view of Young et al., and further in view of Bock '831:**

Claims 33 - 37, 39, 42 - 49, 51, 52, and 55 - 56 are rejected under 35 U.S.C. §103(a) as obvious over U.S. 5,890,249 issued to Hoffman (hereinafter "Hoffman") in view of U.S. 5,891,197 issued to Young et al., (hereinafter "Young") and further in view of Bock '831 for the reasons of record stated at pages 8 - 9 of the Office Action. Applicants respectfully traverse this rejection on the basis that Young is disqualified as a reference in accordance with 35 U.S.C. §103(C). Young and the instant invention were, at the time the invention was made, subject to an obligation of assignment to the same person. Hence, as Young is disqualified as a reference, the rejection of Claims 33 - 37, 39, 42 - 49, 51, 52, and 55 - 56 over Hoffman in view of Young and further in view of Bock '831 is overcome, Applicants respectfully request that the Examiner withdraw this rejection.

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<sup>2</sup> Column 8, line 43 of Bock '624 indicates the following: "*A useful frequency is 1.6 MHz*".

**Sawyer in view of Bock '831:**

Claims 33 - 36, 38 - 39, 41 - 51, and 55 are rejected under 35 U.S.C. §103(a) as obvious over U.S. 3,357,033 issued to Sawyer (hereinafter "Sawyer") in view of Bock '831 for the reasons of record stated at pages 9 - 12 of the Office Action. Sawyer purports to relate to a cleaning tool which utilizes a source of sonic energy in the lower sonic range. [See column 1, lines 10 - 15 and lines 50 - 55 of Sawyer]. As previously discussed, Bock '831 teaches an ultrasonic toothbrush for removing plaque and tartar from teeth. The cleaning tool taught by Sawyer does not utilize ultrasonic energy. Furthermore, as acknowledged by the Examiner on pages 10 and 11 of the Office Action, Sawyer does not disclose having a cleaning head surface greater than about 6.25 cm<sup>2</sup>. Nor as acknowledged by the Examiner does Sawyer have a power output of at least about 0.02 watts/cm<sup>2</sup>. Yet further, as acknowledged by the Examiner, Sawyer does not teach or suggest a cleaning device having *inter alia* a transducer means having an average oscillating frequency of from about 1000 Hz to about 100 KHz. Nor for the reasons as previously discussed above, does Bock '831 teach or suggest the limitations of Claims 33 - 36, 38 - 39, 41 - 51, and 55. Hence, these claims are not obvious over Sawyer in view of Bock '831. Applicants respectfully request that this rejection be reconsidered and withdrawn.

**Sawyer in view of Bock '831:**

Claims 53, 54, 57, and 58 are rejected under 35 U.S.C. §103(a) as obvious over Sawyer in view of Bock '831 for the reasons of record stated on page 12 of the Office Action. The Office Action indicates that "*Sawyer and '831 disclose all elements regarding the device as stated above however do not disclose instructions for using the product*". Applicants agree that Sawyer does not disclose instructions for using the product. Furthermore, as Applicants have indicated in the discussion of Sawyer and Bock '831 above, neither Sawyer nor Bock '831 disclose Applicants' claimed frequency range from about 1000 Hz to about 100 kHz. Nor does Sawyer or Bock '831 disclose a cleaning head surface greater than 6.25cm<sup>2</sup>. Hence, Claims 53, 54, and 57 are not obvious over Sawyer in view of Bock '831. Applicants respectfully request that the Examiner withdraw this rejection.

**SUMMARY**

This is responsive to the Office Action dated June 3, 2005. A one month extension of time is requested to respond to this Office Action. As the rejections have been overcome, it is believed that the claims are in condition for allowance. Applicants respectfully request the rejections be reconsidered and withdrawn and the claims allowed.

Respectfully submitted,  
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